



Document Purpose

This document is developed as an addendum to a formal cruise plan to be filed with the vessel prior to disembarking. This document describes the data management procedures, protocols, and policies to be followed post-cruise that have been agreed upon by the project principals and the data management team assigned to this mission.

General Description of the Data to be Managed

The final year of a multi-year effort to study Lophelia coral communities in the Gulf of Mexico is occurring on the TDI-Brooks research vessel, Brooks McCall, between July 12 and July 24, 2012. The mission Lophelia II 2012 will generate approximately 10 terabytes of high-definition video from the KRAKEN ROV. Surveys of coral density and depth distribution, fish counts surveys, and measurements of coral colonies for growth rate calculations will be conducted. Water samples, push cores, and coral specimens will be collected.

- Name of Dataset
 - : “Lophelia II 2012: Coral Research on Oil Rigs in the Gulf of Mexico”
- Mission Specific Keywords:
 - Place Specific:
 - Freeport, TX
 - Pensacola, FL
 - North Atlantic
 - Gulf of Mexico
 - Vioska Knoll
 - Mississippi Canyon
 - Theme Specific:
 - Kraken
 - Kraken2
 - NURTEC
 - Oil Rig Platform
 - Lophelia
 - Leiopathes
 - Coral Density
 - Coral Depth Distribution
 - Coral Growth Rate
 - VK 906
 - MC 354
 - Fish survey
 - Box cores

Data Management Plan: Lophelia II 2012

- Push cores
- Bonsack cylinder
- Mississippi Delta Platforms
- Baldpate
- Joliet
- Bullwinkle
- Zinc Subsea
- Cognac
- Pompano
- Ram Powell
- Neptune
- Petronius

- Summary description:

Objectives of the Lophelia II 2012 mission are:

- document the occurrence, depth range and growth rates of Lophelia on oil rigs in the Gulf of Mexico;
- obtain the samples necessary for a population genetic analysis of Lophelia and for live animal studies proposed by Erik Cordes;
- document the other corals on the rigs as well as the associated fauna;
- support the other USGS and BOEM PI projects including coring near and far to investigate a reef effect on the infauna;
- support Chris Kellogg's microbiome work;
- support Ian McDonald's coral aging ¹⁴C analyses;
- collect Lophelia and Leiopathes to deliver to Penn State and Temple Universities for laboratory studies.
- Temporal Bounds:
 - July 12 – July 23, 2012
- Spatial Bounds:
 - Northern: 30.1
 - Southern: 25.5
 - Western: -94
 - Eastern: -85.3
- Data Type Collections for Preservation/Stewardship:
 - Oceanographic/meteorological sensor readings from vessel
 - Oceanographic sensor readings from ROV
 - 100 DVDs of dive video from the ROV Pilot Camera
 - Research findings data (after two years)
 - Core sample collection data (sample ID, date, time, lat, lon, water depth, sampling device, brief description, dive number, contact information of sample custodian(s) or comment on disposition of the sample)
- Data Product/Product Collections for Preservation/Stewardship:
 - Highlight Images/Framegrabs with Captions/Credits
 - Highlight Video Clips with Captions
 - Dive Summary Reports
 - Quick Look Report

Data Management Plan: Lophelia II 2012

- Final Cruise Summary document
 - Research findings publications (when available)
- Volume of Data Expected
 - The volume of data is unknown.
- Personally Identifiable Information (PII) concerns
 - No PII will be included in these data.

Points of Contact

- Overall Point of Contact (POC) for the data:
 - Data Acquisition: Emily Crum (Emily.Crum@noaa.gov)
 - Data Management: Susan Gottfried (Susan.Gottfried@noaa.gov) and Gary Wolff, TDI-Brooks (garywolff@tdi-bi.com)
- Responsible for Data Quality:
 - Data quality will be the responsibility of the mission chief scientist.
- Responsible for data documentation and metadata activities:
 - National Coastal Data Development Center (NCDDC); Susan Gottfried, OER Data Management Coordinator
- Responsible for the data storage and data disaster recovery activities:
 - NOAA National Data Centers; National Oceanographic Data Center (NODC), National Geophysical Data Center (NGDC), NOAA Central Library (NCL)
- Responsible for ensuring adherence to this data management plan, including resources are made available to implement the DMP:
 - Data Acquisition: Emily McDonald, Expedition Coordinator
 - Data Management: Susan Gottfried, OER Data Management Coordinator

Data Documentation

- An ISO format metadata record to document the mission will be generated during pre-cruise planning and published in an OER catalog for public discovery and access. Documentation templates will be provided for post-mission products with references back to the overall mission metadata documents. Data collections and products will be documented with ISO or FGDC CSDGM metadata and published at the appropriate NOAA Data Center.
- ISO 19115-2 Geographic Information with Extensions for Imagery and Gridded Data will be the metadata standard employed.

Data Sharing

- Sensor data from vessel and ROV, and ROV Pilot camera video will be shared immediately post-mission. Research data and post-processed data and data products will be shared as soon as possible after scientific participants have submitted these data and released these data for public consumption. Summary reports of ROV dives and the overall mission will be shared as soon as they are developed post-mission.

Initial Data Storage and Protection

- Data received from this mission will be preserved on OER servers at NCDDC while it is organized, documented, and prepared to be submitted to the NOAA Data Centers.

Long-Term Archiving and Preservation

- Data from this mission will be preserved and stewarded through the NOAA National Data Centers. **Data Management Objectives**

The DMT's objectives for this mission are to document data generated as a result of this mission and steward the data into the appropriate NOAA National Data Center.

Expedition Principals for Data Management

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